#10
KP
11-29-00

1632

RAW SEQUENCE LISTING DATE: 11/07/2000
PATENT APPLICATION: US/09/518,931 TIME: 11:36:26

Input Set : A:\454p1 SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

<110> APPLICANT: Gentz, Reiner
<120> TITLE OF INVENTION: Tumor Necrosis Factor Receptors 6 Alpha and 6 Beta
<130> FILE REFERENCE: PF454P1
<140> CURRENT APPLICATION NUMBER: 09/518,931
<141> CURRENT FILING DATE: 2000-03-03
<150> PRIOR APPLICATION NUMBER: 09/006,352
<151> PRIOR FILING DATE: 1998-01-13
<150> PRIOR APPLICATION NUMBER: 60/121,774
<151> PRIOR FILING DATE: 1999-03-04
<150> PRIOR APPLICATION NUMBER: 60/124,092
<151> PRIOR FILING DATE: 1999-03-12
<150> PRIOR APPLICATION NUMBER: 60/131,279
<151> PRIOR FILING DATE: 1999-04-27
<150> PRIOR APPLICATION NUMBER: 60/131,964
<151> PRIOR FILING DATE: 1999-04-30
<150> PRIOR APPLICATION NUMBER: 60/146,371
<151> PRIOR FILING DATE: 1999-08-02
<150> PRIOR APPLICATION NUMBER: 60/168,235
<151> PRIOR FILING DATE: 1999-12-01
<160> NUMBER OF SEQ ID NOS: 27
<170> SOFTWARE: PatentIn Ver. 2.1
<210> SEQ ID NO: 1
<211> LENGTH: 1077
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<220> FEATURE:
<221> NAME/KEY: CDS
<222> LOCATION: (25)..(924)
<400> SEQUENCE: 1

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tcg ctg ctg tgc ctg gtg ttg gcg ctg cct gcc ctg ctg ccg gtg ccg    99
Ser Leu Leu Cys Leu Val Leu Ala Leu Pro Ala Leu Leu Pro Val Pro
 10                  15                  20                  25
gct gta cgc gga gtg gca gaa aca ccc acc tac ccc tgg cgg gac gca   147
Ala Val Arg Gly Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala
                30                  35                  40
gag aca ggg gag cgg ctg gtg tgc gcc cag tgc ccc cca ggc acc ttt   195
Glu Thr Gly Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe
            45                  50                  55
gtg cag cgg ccg tgc cgc cga gac agc ccc acg acg tgt ggc ccg tgt   243
Val Gln Arg Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys
        60                  65                  70
cca ccg cgc cac tac acg cag ttc tgg aac tac ctg gag cgc tgc cgc   291
Pro Pro Arg His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg
    75                  80                  85
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See p. 5

RAW SEQUENCE LISTING DATE: 11/07/2000
PATENT APPLICATION: US/09/518,931 TIME: 11:36:26

Input Set : A:\454pl SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

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71 tac tgc aac gtc ctc tgc ggg gag cgt gag gag gag gca cgg gct tgc   339
72 Tyr Cys Asn Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys
73  90                  95                 100                 105
75 cac gcc acc cac aac cgt gcc tgc cgc tgc cgc acc ggc ttc ttc gcg   387
76 His Ala Thr His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala
77                 110                 115                 120
79 cac gct ggt ttc tgc ttg gag cac gca tcg tgt cca cct ggt gcc ggc   435
80 His Ala Gly Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly
81             125                 130                 135
83 gtg att gcc ccg ggc acc ccc agc cag aac acg cag tgc cag ccg tgc   483
84 Val Ile Ala Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln Pro Cys
85         140                 145                 150
87 ccc cca ggc acc ttc tca gcc agc agc tcc agc tca gag cag tgc cag   531
88 Pro Pro Gly Thr Phe Ser Ala Ser Ser Ser Ser Ser Glu Gln Cys Gln
89     155                 160                 165
91 ccc cac cgc aac tgc acg gcc ctg ggc ctg gcc ctc aat gtg cca ggc   579
92 Pro His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val Pro Gly
93 170                 175                 180                 185
95 tct tcc tcc cat gac acc ctg tgc acc agc tgc act ggc ttc ccc ctc   627
96 Ser Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe Pro Leu
97                 190                 195                 200
99 agc acc agg gta cca gga gct gag gag tgt gag cgt gcc gtc atc gac   675
100 Ser Thr Arg Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val Ile Asp
101             205                 210                 215
103 ttt gtg gct ttc cag gac atc tcc atc aag agg ctg cag cgg ctg ctg   723
104 Phe Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg Leu Leu
105         220                 225                 230
107 cag gcc ctc gag gcc ccg gag ggc tgg ggt ccg aca cca agg gcg ggc   771
108 Gln Ala Leu Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg Ala Gly
109     235                 240                 245
111 cgc gcg gcc ttg cag ctg aag ctg cgt cgg cgg ctc acg gag ctc ctg   819
112 Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Arg Leu Thr Glu Leu Leu
113 250                 255                 260                 265
115 ggg gcg cag gac ggg gcg ctg ctg gtg cgg ctg ctg cag gcg ctg cgc   867
116 Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala Leu Arg
117                 270                 275                 280
119 gtg gcc agg atg ccc ggg ctg gag cgg agc gtc cgt gag cgc ttc ctc   915
120 Val Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg Phe Leu
121             285                 290                 295
123 cct gtg cac tgatcctggc cccctcttat ttattctaca tccttggcac           964
124 Pro Val His
125         300
127 cccacttgca ctgaaagagg ctttttttta aatagaagaa atgaggtttc ttaaagctta 1024
129 tttttataaa gcttttttcat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa       1077
132 <210> SEQ ID NO: 2
133 <211> LENGTH: 300
134 <212> TYPE: PRT
135 <213> ORGANISM: Homo sapiens
137 <400> SEQUENCE: 2
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RAW SEQUENCE LISTING DATE: 11/07/2000
PATENT APPLICATION: US/09/518,931 TIME: 11:36:26

Input Set : A:\454p1 SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

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138 Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys Leu Val Leu
139   1               5                  10                  15
141 Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
142             20                  25                  30
144 Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
145         35                  40                  45
147 Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
148     50                  55                  60
150 Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
151 65                  70                  75                  80
153 Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
154                 85                  90                  95
156 Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
157             100                 105                 110
159 Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
160         115                 120                 125
162 His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Thr Pro
163     130                 135                 140
165 Ser Gln Asn Thr Gln Cys Gln Pro Cys Pro Pro Gly Thr Phe Ser Ala
166 145                 150                 155                 160
168 Ser Ser Ser Ser Ser Glu Gln Cys Gln Pro His Arg Asn Cys Thr Ala
169                 165                 170                 175
171 Leu Gly Leu Ala Leu Asn Val Pro Gly Ser Ser Ser His Asp Thr Leu
172             180                 185                 190
174 Cys Thr Ser Cys Thr Gly Phe Pro Leu Ser Thr Arg Val Pro Gly Ala
175         195                 200                 205
177 Glu Glu Cys Glu Arg Ala Val Ile Asp Phe Val Ala Phe Gln Asp Ile
178     210                 215                 220
180 Ser Ile Lys Arg Leu Gln Arg Leu Leu Gln Ala Leu Glu Ala Pro Glu
181 225                 230                 235                 240
183 Gly Trp Gly Pro Thr Pro Arg Ala Gly Arg Ala Ala Leu Gln Leu Lys
184                 245                 250                 255
186 Leu Arg Arg Arg Leu Thr Glu Leu Leu Gly Ala Gln Asp Gly Ala Leu
187             260                 265                 270
189 Leu Val Arg Leu Leu Gln Ala Leu Arg Val Ala Arg Met Pro Gly Leu
190         275                 280                 285
192 Glu Arg Ser Val Arg Glu Arg Phe Leu Pro Val His
193     290                 295                 300
197 <210> SEQ ID NO: 3
198 <211> LENGTH: 1667
199 <212> TYPE: DNA
200 <213> ORGANISM: Homo sapiens
202 <220> FEATURE:
203 <221> NAME/KEY: CDS
204 <222> LOCATION: (73)..(582)
206 <400> SEQUENCE: 3
207 tggcatgtcg gtcaggcaca gcagggtcct gtgtccgcgc tgagccgcgc tctccctgct 60
209 ccagcaagga cc atg agg gcg ctg gag ggg cca ggc ctg tcg ctg ctg tgc 111
210               Met Arg Ala Leu Glu Gly Pro Gly Leu Ser Leu Leu Cys
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RAW SEQUENCE LISTING DATE: 11/07/2000
PATENT APPLICATION: US/09/518,931 TIME: 11:36:26

Input Set : A:\454pl SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

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211                 1               5                  10
213 ctg gtg ttg gcg ctg cct gcc ctg ctg ccg gtg ccg gct gta cgc gga   159
214 Leu Val Leu Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly
215      15                  20                  25
217 gtg gca gaa aca ccc acc tac ccc tgg cgg gac gca gag aca ggg gag   207
218 Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu
219  30                  35                  40                  45
221 cgg ctg gtg tgc gcc cag tgc ccc cca ggc acc ttt gtg cag cgg ccg   255
222 Arg Leu Val Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro
223                  50                  55                  60
225 tgc cgc cga gac agc ccc acg acg tgt ggc ccg tgt cca ccg cgc cac   303
226 Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His
227              65                  70                  75
229 tac acg cag ttc tgg aac tac ctg gag cgc tgc cgc tac tgc aac gtc   351
230 Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val
231          80                  85                  90
233 ctc tgc ggg gag cgt gag gag gag gca cgg gct tgc cac gcc acc cac   399
234 Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His
235      95                  100                 105
237 aac cgt gcc tgc cgc tgc cgc acc ggc ttc ttc gcg cac gct ggt ttc   447
238 Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe
239 110                 115                 120                 125
241 tgc ttg gag cac gca tcg tgt cca cct ggt gcc ggc gtg att gcc ccg   495
242 Cys Leu Glu His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro
243                 130                 135                 140
245 ggt gag agc tgg gcg agg gga ggg gcc ccc agg agt ggt ggc cgg agg   543
246 Gly Glu Ser Trp Ala Arg Gly Gly Ala Pro Arg Ser Gly Gly Arg Arg
247             145                 150                 155
249 tgt ggc agg ggt cag gtt gct ggt ccc agc ctt gca ccc tgagctagga    592
250 Cys Gly Arg Gly Gln Val Ala Gly Pro Ser Leu Ala Pro
251         160                 165                 170
253 caccagttcc cctgaccctg ttcttccctc ctggctgcag gcacccccag ccagaacacg 652
255 cagtgccagc cgtgcccccc aggcaccttc tcagccagca gctccagctc agagcagtgc 712
257 cagccccacc gcaactgcac ggccctgggc ctggccctca atgtgccagg ctcttcctcc 772
259 catgacaccc tgtgcaccag ctgcactggc ttccccctca gcaccagggt accaggtgag 832
261 ccagaggcct gaggggcagc cacactgcag gccaggccca cttgtgccct cactcctgcc 892
263 cctgcacgtg catctagcct gaggcatgcc agctggctct gggaaggggc cacagtggat 952
265 ttgaggggtc aggggtccct ccactagatc cccaccaagt ctgccctctc aggggtggct 1012
267 gagaatttgg atctgagcca gggcacagcc tcccctggag agctctggga aagtgggcag 1072
269 caatctccta actgcccgag gggaaggtgg ctggctcctc tgacacgggg aaaccgaggc 1132
271 ctgatggtaa ctctcctaac tgcctgagag gaaggtggct gcctcctctg acatggggaa 1192
273 accgaggccc aatgttaacc actgttgaga agtcacaggg ggaagtgacc cccttaacat 1252
275 caagtcaggt ccggtccatc tgcaggtccc aactcgcccc ttccgatggc ccaggagccc 1312
277 caagcccttg cctgggcccc cttgcctctt gcagccaagg tccgagtggc cgctcctgcc 1372
279 ccctaggcct ttgctccagc tctctgaccg aaggctcctg ccccttctcc agtccccatc 1432
281 gttgcactgc cctctccagc acggctcact gcacagggat ttctctctcc tgcaaacccc 1492
283 ccgagtgggg cccagaaagc agggtacctg gcagcccccg ccagtgtgtg tgggtgaaat 1552
285 gatcggaccg ctgcctcccc accccactgc aggagctgag gagtgtgagc gtgccgtcat 1612
287 cgactttgtg gctttccagg acatctccat caagaggagc ggctgctgca ggccc      1667
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RAW SEQUENCE LISTING DATE: 11/07/2000
PATENT APPLICATION: US/09/518,931 TIME: 11:36:26

Input Set : A:\454pl SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

<210> SEQ ID NO: 4
<211> LENGTH: 170
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 4

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Ala Leu Pro Ala Leu Leu Pro Val Pro Ala Val Arg Gly Val Ala Glu
            20                  25                  30
Thr Pro Thr Tyr Pro Trp Arg Asp Ala Glu Thr Gly Glu Arg Leu Val
        35                  40                  45
Cys Ala Gln Cys Pro Pro Gly Thr Phe Val Gln Arg Pro Cys Arg Arg
    50                  55                  60
Asp Ser Pro Thr Thr Cys Gly Pro Cys Pro Pro Arg His Tyr Thr Gln
65                  70                  75                  80
Phe Trp Asn Tyr Leu Glu Arg Cys Arg Tyr Cys Asn Val Leu Cys Gly
                85                  90                  95
Glu Arg Glu Glu Glu Ala Arg Ala Cys His Ala Thr His Asn Arg Ala
            100                 105                 110
Cys Arg Cys Arg Thr Gly Phe Phe Ala His Ala Gly Phe Cys Leu Glu
        115                 120                 125
His Ala Ser Cys Pro Pro Gly Ala Gly Val Ile Ala Pro Gly Glu Ser
    130                 135                 140
Trp Ala Arg Gly Gly Ala Pro Arg Ser Gly Gly Arg Arg Cys Gly Arg
145                 150                 155                 160
Gly Gln Val Ala Gly Pro Ser Leu Ala Pro
                165                 170
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<210> SEQ ID NO: 5
<211> LENGTH: 455
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 5

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Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro
            20                  25                  30
His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys
        35                  40                  45
Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys
    50                  55                  60
Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp
65                  70                  75                  80
Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu
                85                  90                  95
Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val
            100                 105                 110
Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg
        115                 120                 125
Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe
```

F.Y.I.

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY DATE: 11/07/2000
PATENT APPLICATION: US/09/518,931 TIME: 11:36:27

Input Set : A:\454pl SL Jul2000 PA
Output Set: N:\CRF3\11072000\I518931.raw

L:1418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1425 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:1455 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18